

Table A.4.14. East Yard AOC 27 Summary of Boring Log and Analytical Data

Boring/ Date/ Report	Total Depth of Boring	Depth to Water ¹	Lithologic Description ² (Observation Notes)	Maximum PID Response, ppm _v (Depth)	Sample Type ³	Sample ID (Depth)	Analyses ⁴	COC Concentrations Greater Than Delineation Criteria
S1410 1/17/03 Full RFI 2 nd Iteration (AOC 27)	12	--	Fill: 0-10.5 (black stained silt at 2-2.5; black fly ash, little brick and glass fragments; little LNAPL globules at 8-10; tar asphalt, few catalyst beads at 10-10.5) Clay: 10.5-12	1500 (7.5-8)	P, U, F	S1410A4 (1.5-2)	BTEX, As	None
					P, U, F	S1410D4 (7.5-8)	BTEX, As	Benzene: 11 mg/kg
					P, U, N	S1410F4 (11.5-12)	BTEX, As	None
S1409 1/17/03 Full RFI 2 nd Iteration (AOC 27)		--			P, U, F	S1409C4 (5.5-6)	V, S, M	Benzene: 3.1 mg/kg
S1408 1/17/03 Full RFI 2 nd Iteration (AOC 27)		--			P, U, F	S1408B3 (2.5-3)	V, S, M	none
S1407 1/17/03 Full RFI 2 nd Iteration (AOC 27)	12	--	Fill: 0-10.5 (black fly ash with some brick fragments at 9-9.5) Clay: 10.5-12	931 (8-8.5)	O, U, F	S1407A4 (1.5-2)	BTEX, As	None
					O, U, F	S1407E1 (8-8.5)	BTEX, As	None
					O, U, N	S1407F2 (10.5-11)	BTEX, As	None
S0850 (MW146) 8/21/02 Full RFI (AOC 16/EY1)	12	1	Fill: 0-8: (slag and petroleum odor at 7-8) No recovery: 8-10 Peat: 10-12	755 (7-7.5)	O, S, F	S0850C2 (4.5-5)	V, S, M	<i>Benzene: 1.9 mg/kg (Impact to Groundwater—not applicable)</i> Iron: 29400 mg/kg
					O, S, F	S0850D3 (7-7.5)	V, S, M	Benzene: 2.5 mg/kg (Impact to Groundwater—not applicable) Arsenic: 23.9 mg/kg
					O, S, N	S0850F2 (10.5-11)	V, S, M	Iron: 24900 mg/kg

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					Water	MW146 (10/7/02)	V, S, M, water quality	Benzene: 100 ug/L 2-Methylpentane: 180J ug/L Arsenic: 79.2 ug/L
S0849 (MW145) 8/21/02 Full RFI (AOC 27)	16	6.5	Fill: 0-10.5 Silt/clay: 10.5-12 Silt: 12-14 Silt/clay: 14-16	8 (0-0.5)	P, U, F	S0849A3 (1-1.5)	V, S, M	Iron: 27800 mg/kg
					P, U, F	S0849 (2-4)	SPLP metals; Phys Char.	None
					P, U, F	S0849D1 (6-6.5)	V, S, M	Iron: 29700 mg/kg
					P, S, N	S0849G2 (12.5-13)	V, S, M	Iron: 32900 mg/kg
					Water	MW145 (102/02)	V, S, M water quality	Cobalt : 121 ug/L
H0514 9/20/99 1 st Groundwater (AOC 27)	12	3	Fill: 1-5 Clay: 5-7 Sands: 7-8 No recovery: 8-9 Clay: 9-12	2360 (3-4)	Water	H0514	V, S	Ethylbenzene: 5700 ug/L Methyl ethyl ketone: 1100 ug/L Xylenes: 10000 ug/L 1-Methylnaphthalene: 620 ug/L 2-Methylnaphthalene: 610 ug/L Naphthalene: 870D ug/L
H0513 9/20/99 1 st Groundwater (AOC 27)	12	3	Fill: 1-5 Clay: 5-8 No recovery: 8-9 Clay: 9-10 (hydrocarbon odor) Meadow mat: 10-12	139 (3-4)	Water	H0513	V, S	Benzene: 47 ug/L Xylenes: 120 ug/L 1-Methylnaphthalene: 350 ug/L 2-Methylnaphthalene: 490 ug/L Naphthalene: 380 ug/L
PE068 10/20/98 (AOC 27)					Post excavation	PE068	TPH	None
PE067 10/20/98 (AOC 27)					Post excavation	PE067	TPH	None

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PE066 10/20/98 (AOC 27)					Post excavation	PE066	TPH	None
PE065 10/20/98 (AOC 27)					Post excavation	PE065	TPH	None
PE064 10/20/98 (AOC 27)					Post excavation	PE064	TPH	TPH: 14200 mg/kg
PE063 10/20/98 (AOC 27)					Post excavation	PE063	TPH	none
PE062 10/20/98 (AOC 27)					Post excavation	PE062	TPH	None
PE061 10/20/98 (AOC 27)					Post excavation	PE061	TPH	None
PE060 10/20/98 (AOC 27)					Post excavation	PE060	TPH	None
PE059 10/20/98 (AOC 27)					Post excavation	PE059	TPH	TPH: 14500 mg/kg
PE058 10/20/98 (AOC 27)					Post excavation	PE058	TPH	None
PE057 10/20/98 (AOC 27)					Post excavation	PE057	TPH	None
PE056 10/20/98 (AOC 27)					Post excavation	PE056	TPH	None
PE055 10/20/98 (AOC 27)					Post excavation	PE055	TPH	TPH: 24600 mg/kg
PE054 10/20/98 (AOC 27)					Post excavation	PE054	TPH	TPH: 10800 mg/kg

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SB0281 5/14/97 1 st OWSS (EY-1)	8	5	Fill: 0-8: (strong petroleum odor at 2-8; black staining at 6-8)	345 (4-6)	O, U, F	SB0281SC (4-6)	V, S, M, TPH	Naphthalene: 170 mg/kg
HP0058 10/17/96 1 st OWSS (EY-1)	8	5.5	Fill: 0-8: (petroleum odor and staining at 0-6; Sheen at 4-6)	444 (6-8)	Water	HP0058A	V, S, M, TPH	Benzene: 58 ug/L Xylenes: 110 ug/L Antimony: 148 ug/L Arsenic: 505 ug/L Barium: 2020 ug/L Chromium: 3700 ug/L Lead: 3490 ug/L Mercury: 13.2 ug/L Nickel: 1780 ug/L Selenium: 83.1 ug/L Vanadium: 733 ug/L
HP0044 9/30/96 1 st OWSS (EY-1)	8	5	Fill: 0-8: (trace black staining at 1.8-2; petroleum odor and staining at 2-8)	1903 (6-8)	Water	HP0044A	V, S, M, TPH	Benzene: 24000 ug/L Ethylbenzene: 150000 ug/L Toluene: 46000 ug/L Xylenes: 1200000 ug/L Benzo(a)anthracene: 21 ug/L Benzob)fluoranthene: 13 ug/L Benzo(k)fluoranthene: 5 ug/L 1-Methylnaphthalene: 3600 ug/L 2-Methylnaphthalene: 6900 ug/L Indene: 770 ug/L Naphthalene: 7300 ug/L Arsenic: 167 ug/L Beryllium 21 ug/L Cadmium: 13 ug/L Lead: 2740 ug/L Nickel: 143 ug/L Vanadium: 415 ug/L

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HP0038 9/25/96 1 st OWSS (EY-1)	10	7.7	Fill: 0-10: (petroleum odor at 0.6-6; staining at 2-6; "petroleum saturated" at 7.7)	508 (6-8)	Water	HP0038A	V, S, M, TPH	Benzene: 3000 ug/L Ethylbenzene: 1900 ug/L Xylenes: 1900 ug/L Arsenic: 795 ug/L Barium: 3510 ug/L Beryllium: 34 ug/L Cadmium: 27.5 ug/L Chromium: 2020 ug/L Lead: 5200 ug/L Nickel: 1210 ug/L Vanadium: 1300 ug/L

NOTES:

Benzene and benzo(a)pyrene are highlighted in bold because they are indicator constituents of concern (COCs)

Shaded rows indicate samples collected from nearby SWMUs/AOCs

ppm_v = parts per million (volume basis)

All depths referenced on this summary table are in feet below the ground surface.

PID = Photoionization detector.

ID = Identifier.

mg/kg = milligrams per kilogram (equivalent to parts per million).

µg/L = micrograms per liter (equivalent to parts per million).

¹Depth to water as observed during borehole advancement.

²"Fill" encountered within the completed borings was characteristically described as an asphalt layer (typical) underlain by a heterogeneous gravel to clay mixture of unconsolidated materials, ranging in color from tan to gray with occasional construction debris (e.g., brick) present. In some locations, the fill material is further characterized by containing a slag or beaded material, in which case it is noted within the table. Also noted on the table are any other olfactory or visual observations that indicate potential petroleum-type impacts within the fill unit were observed.

³P – property boundary, O – on-site, U – unsaturated, S – saturated, F – fill, N – native. "None" indicates that no sample was collected.

⁴V – VOCs, S – SVOCs, M – metals, Pb – lead, TOL – total organic lead, TEL – tetraethyl lead, TPH – Total Petroleum Hydrocarbons; SPLP -- Synthetic Precipitation Leaching Procedure; -Phys. Char. -- physical characteristics.